

**Translation**

**PATENT COOPERATION TREATY**

PCT/JP2003/010948



**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PC-8938	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/JP2003/010948	International filing date (day/month/year) 28 August 2003 (28.08.2003)	Priority date (day/month/year) 30 August 2002 (30.08.2002)
International Patent Classification (IPC) or national classification and IPC H01M 2/20, 2/34		
Applicant TYCO ELECTRONICS RAYCHEM K.K.		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>	
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>	

Date of submission of the demand 09 March 2004 (09.03.2004)	Date of completion of this report 11 November 2004 (11.11.2004)
Name and mailing address of the IPEA/JP	Authorized officer
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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/010948

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ The international application as originally filed/furnished
- ☐ the description:
- pages \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the claims:
- pages \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_, as amended (together with any statement) under Article 19
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the drawings:
- pages \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP03/10948

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	2-5	YES
	Claim	1	NO
Inventive step (IS)	Claims		YES
	Claims	1-5	NO
Industrial applicability (IA)	Claims		YES
	Claims	1-5	NO

## 2. Citations and explanations (Rule 70.7)

Document 1: EP 1091366 A1 (TYCO Electronics Corp.), April 11, 2001, Figs. 3, 4 & JP 2001-102039 A & US 6362721 B1

Document 2: WO 98/20567 A (Raychem Corp.), May 14, 1998, Figs. 5-7 & JP 2001-503561 A & US 5856773 A

Document 3: Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 25348/1989 (Laid-open No. 117662/1990) (Fuji Denki Kagaku Kabushiki Kaisha), September 20, 1990

Document 4: JP 3-77263 A (Matsushita Electric Industrial Co., Ltd.), April 2, 1991, Fig. 3

Document 5: JP 7-57721 A (Matsushita Electric Industrial Co., Ltd.), March 3, 1995, Full text

Document 6: JP 5-325942 A (Matsushita Electric Industrial Co., Ltd.), December 10, 1993, Full text

Document 7: JP 2001-216883 A (Sony Corp.), August 10, 2001, Full text

Document 8: WO 00/16429 A (Raychem Ltd.), May 23, 2001, whole document & JP 2002-525806 A

Document 9: JP 2002-56755 A (Furukawa Seimitsu Kinzoku Kogyo Kabushiki Kaisha), February 22, 2002, Full text

Document 1 (Figs. 3, 4), Document 2 (Figs. 5-8), Document 3 (Figs. 1, 2), Document 4 (Fig. 1, page 2, upper right column, lines 16-17) cited in the ISR describe the invention relating to claim 1; therefore, this invention does not appear to be novel or to involve an inventive step.

The invention relating to claim 2 does not appear to involve an inventive step based on documents 1, 3 and 4, and documents 5-7 cited in the ISR.

It is well-known to expose a point of contact with a battery and embed the other parts into a resin, as can be seen from the descriptions in documents 5-7.

The invention relating to claim 3 does not appear to involve an inventive step based on documents 1-7.

Providing a seat for supporting a terminal is not found to be particularly difficult to a person skilled in the art.

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of Box V:

The invention relating to claim 4 does not appear to involve an inventive step based on documents 1-9.

Documents 7-9 disclose a PCT element connecting a battery terminal and a protective circuit.

Further, because interposing a conductive polymer in a PCT element is publicly known, as can be seen from the descriptions in documents 1-4, it would be easy for a person skilled in the art to interpose conductive polymer in a PCT element that connects a battery terminal and a protective circuit.

The invention relating to claim 5 does not appear to involve an inventive step based on documents 1-9.

Exposing a point of contact with a battery and embedding the other parts into a resin is well-known, as can be seen from the descriptions in documents 5-7.